

Title (en)

STRAIN WAVE GEARING AND WAVE GENERATOR

Title (de)

SPANNUNGSWELLENGETRIEBE UND WELLENGENERATOR

Title (fr)

ENGRENAGE À ONDE DE DÉFORMATION D'ONDE ET GÉNÉRATEUR D'ONDES

Publication

EP 3258590 A4 20181114 (EN)

Application

EP 15881997 A 20150213

Priority

JP 2015054040 W 20150213

Abstract (en)

[origin: EP3258590A1] A wave generator (4) of a strain wave gearing (1) uses a plurality of solid displacement elements (12) to flex a flexible externally toothed gear (3) into a non-circular shape and partially mesh the externally toothed with a rigid internally toothed gear (2). The solid displacement elements (12) are obtained by curving a monomorphic or bimorphic type rectangular plate-shaped element into an arc shape and can be deformed from an arc shape (12A) to a semispherical shape (12B) by energization, the semicircular shape having a smaller radius than the arc radius of the arc shape. A wave generator can be realized, which can bear a large load torque by utilizing changes in rigidity, deformation amount, and deformation force associated with the deformation of the solid displacement elements (12).

IPC 8 full level

H02N 2/00 (2006.01); **F16H 49/00** (2006.01)

CPC (source: EP KR US)

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Citation (search report)

- [A] JP H0524750 B2 19930408
- [AD] JP 2011152026 A 20110804 - AISIN SEIKI
- See references of WO 2016129123A1

Cited by

EP3492775A4; TWI724170B

Designated contracting state (EPC)

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DOCDB simple family (publication)

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